

# ADDENDUM

## RENOVATION STRATEGIES OF SELECTED EU COUNTRIES

A STATUS REPORT ON COMPLIANCE WITH ARTICLE 4 OF THE ENERGY  
EFFICIENCY DIRECTIVE



*Note: This paper should be read together with the BPIE report [“Renovation Strategies of Selected EU Countries”](#)*

Following the publication of BPIE’s report “Renovation Strategies of Selected EU Countries” in November 2014, questions arose about the methodology adopted in scoring the compliance aspects of the different strategies. As stated in that report, the evaluation was based on documents published on the Commission’s Article 4 EED webpage<sup>1</sup>. However, a number of national submissions reported that the relevant topic was covered in other reports. In some cases, links to these other reports were provided, but this was not universally the case.

In order to determine whether the 3 strategies assessed by BPIE as “non-compliant” would have fared better had these other documents been taken into account, a review was undertaken. It should be noted that the assessment was made on only a cursory examination of these external documents, since many of them were extensive, technical reports stretching over 100 pages, available only in the national language.

The 3 strategies originally assessed by BPIE as “non-compliant” were: **Austria, Denmark and The Netherlands**. Below is a discussion of the Article 4 topic areas where scores can be revised on the basis of including material not contained within the renovation strategy itself.

### **Austria**

The reader is referred to the cost optimality report<sup>2</sup> submitted pursuant to Article 4(2) of the Energy Performance of Buildings Directive 2010/31/EU. This is a detailed 323-page report setting out the methodology and results of the cost optimality calculations. The score for this item has been raised from 2 to 3, on the basis that the information is available, though it is too long and detailed to be readily assimilated by the casual reader. It is recommended that a relevant summary of the cost optimality results be included in the core renovation strategy.

The score on policies was increased from 1 to 2, on the basis that the National Energy Efficiency Action Plan (NEEAP) has some additional information on federal level policies. Likewise, the links to the individual region websites provide further details on existing measures. However, the revised score is still not considered acceptable, as virtually all policies concern only existing policies (mainly subsidy schemes) in place in the residential sector. Overall, the information provided does not constitute a strategic assessment of the policy needs to renovate the Austrian housing stock.

On forward perspectives, the NEEAP has some projections about renovation activity in the central government estate, as required by Article 5 of the Energy Efficiency Directive. However, as this relates to only a small proportion of the Austrian building stock, this topic has been ascribed a score of just 1 – up from zero previously. No further forward perspective was provided in the Article 4 submission.

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<sup>1</sup> [http://ec.europa.eu/energy/efficiency/eed/article4\\_building\\_strategies\\_en.htm](http://ec.europa.eu/energy/efficiency/eed/article4_building_strategies_en.htm)

<sup>2</sup> [http://ec.europa.eu/energy/efficiency/buildings/doc/at\\_costoptimal\\_2013\\_en.zip](http://ec.europa.eu/energy/efficiency/buildings/doc/at_costoptimal_2013_en.zip) (in German)

The impact of these changes is to raise the overall compliance rating for the Austrian renovation strategy from 28% to 40%. Despite this improvement, the strategy is still rated as NON-COMPLIANT.

## Denmark

The published strategy includes reference to a key background document<sup>3</sup> which includes a detailed assessment of cost effectiveness of different renovation options and future scenarios considering the impact of different depths of renovation. The report also provides additional information on the building stock, in terms of floor area by building type.

It should be noted this is a technical paper, presenting a large number of scenario options. It stops short of identifying a recommended future pathway, and hence does not provide sufficient context to guide investment decisions. Nor does it give the clarity required to appraise the impact in terms of expected savings and wider benefits arising from implementation of the renovation strategy.

This additional information results in increases in the scores for 4 out of the 5 topic areas required under Article 4:

- Overview of building stock – from 2 to 3
- Identification of cost-effective approaches to renovation – from 1 to 3
- Forward-looking perspective to guide investment decisions - from 0 to 2
- Estimate of expected energy savings and wider benefits – from 1 to 2

The overall impact is an improvement in the rating of the Danish building renovation strategy from 32% to 56%. This moves the overall ranking from “NON-COMPLIANT” to “CORRECTIVE ACTION REQUIRED”. In order for the Danish strategy to be considered fully compliant, it would be necessary to contextualise the background technical information into the context of a strategic policy document, for example by identifying which of the many scenarios is the one that most closely resembles the Government’s desired or expected outcome.

## The Netherlands

Four key background documents are referenced in the Dutch renovation strategy. Two relate to the technical analysis of the building stock and energy performance improvement potential (covering residential<sup>4</sup> and non-residential<sup>5</sup> buildings respectively). The other two documents relate to analysis undertaken for the Energy Agreement<sup>6</sup>. Together, these documents paint a more complete picture of the Dutch strategy for renovation of its building stock.

Accordingly, the two sections previously scoring poorly (“Forward-looking perspective to guide investment decisions” and “Identification of cost-effective approaches to renovation”) have been

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<sup>3</sup> SBi 2014:01 “Potentielle energibesparelser ved løbende bygningsrenovering frem til 2050”

<sup>4</sup> “Energiebesparing: Een samenspel van woning en bewoner - Analyse van de module Energie WoON 2012”. Casper Tigchelaar (ECN), Kees Leidelmeijer (RIGO), August 2013, ECN-E-13-037

<sup>5</sup> “Verbetering referentiebeeld utiliteitssector: voorraadgegevens; energiegebruik; besparingspotentieel; investeringskosten; arbeidsinzet”. J.M. Sipma (ECN), December 2013, ECN-E-13-069.

<sup>6</sup> “Het Energieakkoord: Wat gaat het betekenen? Inschatting van de gemaakte afspraken of”, and “Achtergronddocument bij doorrekening SER Energieakkoord - sector Gebouwde omgeving” . C. Tigchelaar, M. Menkveld (ECN), September 2013, ECN-E-13-045.

regraded to a score of 3 each. This improves the overall rating of the Dutch strategy from 40% to 60%. This moves the overall ranking from “NON-COMPLIANT” to “CORRECTIVE ACTION REQUIRED”.

In order for the strategy to be considered fully compliant, it would be necessary to draw out the relevant sections of the technical analysis and include a summary in the core strategy, and also to extract those elements of the Energy Agreement pertaining to the existing stock into a readily digestible summary within the strategy itself.

## Impact on Rankings

The table below presents the revised scores and overall rankings for Austria, Denmark and The Netherlands alongside the other strategies, whose scores have not been adjusted.

**TABLE – revised scoring based on assessment of external documents referred to in the national renovation strategies of Austria, Denmark and The Netherlands**

COMPLIANCE WITH EED ARTICLE 4 REQUIREMENTS						
COUNTRY	Overview of the building stock	Identification of cost-effective approaches to renovation	Policies to stimulate cost-effective renovation	Forward-looking perspective to guide investment decisions	Estimate of expected energy savings and wider benefits	OVERALL level of compliance with Article 4
<i>Austria</i>	<i>3</i>	<i>3</i>	<i>2</i>	<i>1</i>	<i>1</i>	<i>40%</i>
Brussels	5	5	3	2	2	68%
Czech Republic	3	3	4	4	4	72%
<i>Denmark</i>	<i>3</i>	<i>3</i>	<i>4</i>	<i>2</i>	<i>2</i>	<i>56%</i>
France	4	4	4	2	2	64%
Germany	4	2	3	2	3	56%
<i>Netherlands</i>	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>	<i>60%</i>
Romania	3	3	4	4	4	72%
Spain	4	4	3	4	3	72%
UK	5	4	3	3	3	72%
<b>AVERAGE</b>	<b>3.7</b>	<b>3.4</b>	<b>3.3</b>	<b>2.7</b>	<b>2.7</b>	<b>63%</b>

*KEY – italicised black numbers = revised scores*